## What is Climate Change & What Will We Do About It?

# By Cortney Brown

According to Stanford University "A large body of scientific information indicates that global climate change is unequivocal, almost certainly is caused mostly by human activities, is already causing significant harm, and as it continues, holds great risks for our future. Addressing the risks of climate change requires global and local action to reduce greenhouse gases as well as to reduce vulnerabilities to climate change impacts."

With an unhealthy amount of carbon emissions in our atmosphere, carbon neutrality is an important goal, such as planting trees, preserving land, & replacing with eco energy.

But first, let's try to limit carbon emissions as much as currently possible. We can walk, bike, & transit. Asking city officials to improve these infrastructure systems at seeclickfix.com will save us energy, money, & will even help with traffic issues. Here are some other ways to limit our carbon emissions by Bio Friendly Planet.

### "10 Simple Ways to Lower Your CO2 Emissions

Fortunately, instead of becoming despondent or overwhelmed, we have a few suggestions on how people like you and I can reduce our environmental footprint. By working hard to lower our individual footprint and encourage companies to do the same, we are far more likely to see a reduction in emissions within our lifetime. If you take a look at the CO2 emissions from places like Denmark, Sweden and Congo (Dem Rep) until the early 2000s, you'll see a difference can be made.

Here are 10 ways to lower your emissions and environmental footprint:

- 1. Switch to public transportation. Set up a carpool with co-workers or friends. According to the Rideshare Company, a carpool with four riders "will reduce greenhouse gases by 12,000 pounds annually."
- 2. If you are unable to do either of the above, start using a liquid fuel catalyst proven to reduce emissions, improve engine power and increase fuel economy.
- 3. Adjust your thermostat. Use nature to help heat, cool and light your home during daylight hours. Nature can also help air out your home to eliminate indoor air pollution.
- 4. Buy local and eat at home more often. Find recipes to help you reduce food waste and learn how to cook using everything from root to stem.
  - 5. Eliminate meat from your diet at least once a week.
  - 6. Unplug your appliances and other devices when not in use. This can help you avoid vampire power.
    - 7. Recycle bottles and cans instead of throwing these away.
      - 8. Choose reusable products rather than one-use items.
    - 9. Pay your bills online. Reduce the amount of mail, particularly junk mail, you receive.
      - 10. Invest in clean energy sources like solar, wind or micro-hydro."

To easily **calculate our carbon footprint**, visit websites such as <u>www.terrapass.co</u>m.

Est time 5 mins.

After calculating, there is an equivalent of carbon credits to planting trees. For instance, personally mine would be to plant 222 trees annually til I can save up & find ways to be more carbon neutral. A free way to plant that many trees is to use the search engine at Ecosia.org that would equal to offset. On average 45 searches equals 1 tree planted. Another great organization is One Tree Planted @onetreeplanted.org, planting trees responsibly on preserves in the USA. It is \$1 per 1 tree. To offset my personal carbon footprint with One Tree Planted is \$19/ month. Or you can use carbon credit services to pay for offsets. Here is some more information on credible carbon credit services at wikihow.com/Buy-a-Carbon-Offset. Paying for my own would be \$8/ month. Realistically, work like this is for the transitional period of our generations til climate change is no longer a threat & til we have an established clean energy grid, eco friendly leaders, and a well educated community.

### Some more helpful local climate change action

- > Support eco friendly nonprofits that do all this great work already in our area such as Energy AL, Land Trust of North AL, & AL River's Alliance.
  - > Plant trees locally! Check out the "Planting Trees in North Alabama" page.
  - > Buy local carbon offsets at the Grassy Pond with John & Jimmy Hays (256) 883-9860.
- > & although @globalthermostat.com has their testing facility in HSV, AL for **carbon capture**, their commercial use carbon capture technology is located in NY & OK and their affordable carbon credits will be available soon.
  - ➤ **Ask & work with city council members** to employ a sustainability commission for good green jobs, pollution prevention & preventative healthcare for our town.
- > Use the power of law & order to keep lethal polluters out of our state and drained them of power & finances. Keep in touch with Southern Environmental Law Center @southernenvironment.org.
- To **test any suspected water source pollution** in AL, send in the paperwork from Soil, Forage, and Water Testing 334-844-3958 (available on the last page), included with payment (\$16 to test all pollutants), & a 20 oz. water sample in a **plastic bottle**.
  - > Contact AL Water Watch for their upcoming free classes on do it yourself water testing @ awwprog@auburn.edu
- ➤ Vote for national & local candidates that will work for you in carbon neutrality & away from fossil fuel dependency. Check out upcoming elections at <a href="https://www.sos.alabama.gov/alabama-votes/voter/upcoming-elections">https://www.sos.alabama.gov/alabama-votes/voter/upcoming-elections</a>.

#### **Info For Businesses**

"How to Reduce CO2 Emissions In the Industry Sector

No matter the size of your business, there are steps you can take to reduce carbon dioxide emissions and combat climate change.

- 1. Measuring carbon footprint. By assessing how much pollution an organization's actions generate, you can begin to see how minor policy changes can significantly reduce a company's overall carbon footprint. A carbon footprint can be measured by undertaking a greenhouse gas emissions assessment.<sup>4</sup> Once the size of your carbon footprint is known, you can devise a strategy to reduce it through technological developments, better process and product management, changed Green Public or Private Procurement (GPP), carbon capture, consumption strategies, and others.
- 2. **Carbon capping.** Emissions trading, sometimes known as cap-and-trade policies, puts a limit on carbon dioxide emissions. A government entity sets a "cap" on the emissions that can be produced in its jurisdiction, and companies are given carbon allowances. These allowances can either be used or traded to other companies.<sup>5</sup>
  - 3. **Reducing energy use.** The building industry now has multiple energy efficiency certifications. The standards help set measurable and achievable goals, reducing the amount of energy used from 12 percent all the way to 100 percent of typical building energy use. Some of the most common certifications include LEED Green Building certification, Energy Star, Net Zero Energy Building Certification, and High-Performance Building Program by ICLEI. The industry sector can ensure new buildings are energy efficient by earning any of these ratings.
- 4. Rewarding green commuters: Encouraging employees to switch to public transportation, carpooling, biking, telecommuting, and other environmentally-friendly commutes can add up and have tremendous effects. Employers can offer commuter benefits that address limited or expensive parking, reduce traffic congestion, improve employee recruiting and retention, and minimize the environmental impacts associated with drive-alone commuting.<sup>6</sup>
  - 5. **Reducing fossil fuel dependence.** Burning coal to produce energy creates carbon dioxide emissions and contributes to irreversible climate change. Businesses that make a conscious effort to switch to sustainable energy sources, such as wind or solar power, can help to reduce their daily CO<sub>2</sub> emissions.<sup>2</sup>
- 6. **Voluntary offsets.** If a company can't afford to undertake new energy-efficient building initiatives or put solar panels on buildings, there are alternatives. Balancing your carbon footprints through alternative projects, such as solar or wind energy or reforestation, is known as carbon offsetting. Carbon offsets can be purchased from many third-party suppliers who then engage in these activities on behalf of the business."

Here is some more info about carbon offsetting with Octopus Energy, approved by Friends of the Earth.

Carbon offsetting measures carbon output from one activity, then removes or prevents its release from another.

First, we measure your carbon output by looking at how much gas you use.

Although your gas is measured by volume, you can represent it as kWh. And for every kWh used, <u>0.184 kg of CO<sub>2</sub> is</u> released. A medium usage household burns around 12,500 kWh of gas each year (Ofgem), which in turn releases 2.3 tonnes of CO<sub>2</sub>.

Since trees are excellent carbon absorbers, many offsetting projects involve either planting trees or protecting them from deforestation. A young tree will absorb about 6 kg of CO<sub>2</sub> per year. A mature tree (10 years old) will absorb around 22 kg per year. 30% of the earth's surface is covered by trees, so assuming we can prevent their destruction (and plant more) there's a lot of potential to store, or "sequester", carbon.

Give a big thank you to B Corporations such as Seventh Generation @seventhgeneration.com/about/contact-us for doing the good work in fighting climate change and keeping our world clean & green.

### Some advice from NASA:

"Scientists think we can do things to stop the climate from changing as much. You can help by using less energy and water. Turn off lights and TVs when you leave a room. Turn off the water when brushing your teeth. You also can help by planting trees. Another way to help is by learning about Earth. The more you know about Earth, the more you can help solve climate problems."

Info brought to you on behalf of Alabama Solutions, a grassroots movement | Alabama Solutions.weebly.com

#### Sources:

https://earth.stanford.edu/climate-change-ed

https://biofriendlyplanet.com/eco-awareness/air-quality/emissions/10-ways-to-reduce-your-co2-emissions/
https://www.thebalancesmb.com/reducing-co2-emissions-3157794
https://octopus.energy/blog/what-carbon-offsetting-and-why-does-it-matter/